REMARKS

This Amendment is in response to a non-final Office action (Paper No. 7) dated October 2, 2001. Upon entry of this Amendment, claims 1-6 and 14-37 will be pending in this application. Claims 7-13 have been canceled without prejudice or disclaimer as to their subject matter by this Amendment and claims 16-37 have been newly added by this Amendment.

The Examiner has complained that the title was not descriptive of the invention. Applicant has provided a new title that is more descriptive of Applicant's invention.

The Examiner has rejected claims 1, 2, 4 and 5 under 35 U.S.C. § § 102 (e) and 103 (a) by various combinations of Jeon, U.S. Patent No. 6,122,734, Meyer *et al.,* U.S. Patent 6,170,055 and Halladay, U.S. Patent No. 5,713,024. Applicant respectfully traverses these rejections.

Jeon pertains to a method and apparatus for mass producing CD-ROM's that are used to boot a computer, reload the operating system onto a computer, repair a computer system and install data files to a computer when the computer crashes. In short, Jeon provides a system recovery kit for a computer that uses Windows and data files, all on one CD-ROM disk to be used when a computer system crashes.

Meyer discloses a method and apparatus pertaining to a removable high capacity disk and

a computer. At first, the user creates a boot image and software to reload the operating system in Windows onto the removable disk if the computer should later crash. The disk also contains diagnostic software, repair software, and software providing for backup archive for data from a computer when the computer is unfixable.

Halladay discloses a cold boot backup removable software for a computer, especially when the computer is connected to a network. A floppy disk boots the computer when the computer crashes, and uses backup media 21, a detachable media, to store **all** data, files and programs at various points in time so that when a computer system crashes, it can be rebooted and restored to a state recorded at some previous date and time. Cold boot apparatus 10 is very complex as illustrated in FIG. 1 of Halladay. The backup memory is also huge, as illustrated in step 57 of FIG. 5 of Halladay.

In contradistinction, claims 1 and 2 claim a conflict repair control program having a code means that is loaded in the main memory of the computer system for checking whether the auxiliary memory unit is normal, and a code means for repairing damaged files in the auxiliary memory unit using the program image when there is abnormality in the auxiliary memory unit. The recording medium in claim 1 could be detachable from the computer. The recording medium in claim 2 is in the form of a CD-ROM. Applicant submits that none of the above mentioned applied art, taken either singly or in combination, teach or suggest Applicant's independent claim 1. It is respectfully

requested that the Examiner pass Applicant's claims 1 and 2 onto issue.

In independent claim 4, the recording medium is part of the computer. In independent claim 4, there is no mention of booting or reloading an operating system to achieve a user friendly graphical user interface germane to the operating system. The references to Jeon, Meyer and Halladay all pertain to rebooting by a removable media (e.g., floppy disk or CD-ROM, tape, or other parts of a computer network) when a computer system crashes. Independent claim 4 of Applicant's invention does not pertain to rebooting using outside help. Instead, Applicant's independent claim 4 pertains to self-diagnosis and repair of an already successfully booted and loaded operating system The repair may be to correct a corrupted file or to restore state information to an earlier time and date before the problem existed. The Examiner's attention is drawn to reference numeral 500 in Applicant's FIG. 5. Reference numeral 500 is a non-removable portion of the computer that performs diagnosis, repair, and reversions when a problem occurs when the system is fully booted and the operating system is fully loaded. The Examiner's attention is also drawn to FIG. 7 of Applicant's figures. As illustrated in step 700, if the system is normally booted, the control passes on to step 705 and the rest of the flow chart and step 760 along with FIG. 9 is entirely bypassed, meaning that diagnosis, repair and reversions are accomplished without the use of external detachable media. The rest of the flow chart does not pertain to a removable media. Conflict control unit 500 along with auxiliary memory 530 and main memory 510 provide a self-contained diagnosis program, a repair program, and a means for reverting the computer to an earlier time program. All

of this is self-contained within the computer itself, and does not use or require external CD-ROM's or floppy disks or tapes or a computer network to diagnose, repair or revert the computer to relieve the computer of a problem. None of the references to Jeon, Meyer and Halladay, taken alone or in combination, teach or suggest such a situation. Claim 4 claims a state information recording portion 502, a conflict sensing portion 504, a state diagnosis portion 506 and an existing state reverting portion 508, all found in conflict control unit 500 of Applicant's computer. Since independent claim 4 does not rely on external removable storage devices like CD-ROM's, floppy disks, tapes, or a computer network, Applicant's independent claim 4 are neither taught nor suggested by Jeon, Meyer and/or Halladay, either taken individually or in combination. Also, since Applicant's independent claim 4 do not pertain to errors that occur, repair thereof, diagnostics thereof to a boot sector or to portions in memory of the computer that are used to load an operating system, Applicant submits again that claim 4 is neither taught nor suggested by Jeon, Meyer and/or Halladay, either taken individually or in combination. Applicant's claim 4 uses an external, detachable media (CD-ROM) only when there is a boot problem or a problem in loading the operating system as illustrated in step 760 of Applicant's FIG.7. Applicant's claim 4 does not pertain to the situation of when the boot sector on the computer is corrupted or when the operating system cannot be loaded. It is respectfully requested that the Examiner allow Applicant's claim 4 to pass onto issue without further undue process.

In paragraph 9 of Paper No. 7, the Examiner has rejected independent method claim 14 and

its dependent method claim 15 under 35 U.S.C. § 103 (a) as being unpatentable over Meyer in view

of Jeon. Applicant respectfully traverses this rejection. Applicant submits that step b2 of claim 14

states, "backing up data files stored in the auxiliary memory and formatting the auxiliary memory".

Applicant submits that this "backing up data files" in Applicant's invention only occurs **after** a

conflict has occurred in the auxiliary memory. In Jeon and Meyer, this "backing up data files"

occurs **prior** to the occurrence of a conflict. Applicant submits that both Meyer and Jeon teach

backing up data files **prior** to experiencing a problem such as a conflict. Therefore, Applicant

submits that neither of the references to Meyer and Jeon, taken either singly or in combination, teach

or suggest Applicant's independent method claim 14. It is respectfully requested that the Examiner

allow claims 14 and 15 to pass onto issue without further undue process.

Applicant has added independent method claim 16 with depending claims 17-26 and

independent apparatus claim 27 with depending claims 28-37 to more clearly and succinctly describe

Applicant's invention. Entry of these claims and favorable examination thereof is respectfully

requested.

A Letter to the Office Draftsman accompanies this response regarding changes made to Figs.

5, 6, 7 and 9. Entry of the amendments to Figs. 5, 6, 7 and 9 is respectfully requested. Indication

in subsequent Office correspondence as to the acceptance of the drawing corrections proposed in the

Letter is respectfully requested to enable Applicants to timely arrange for the corrections to be made

prior to the date for payment of any issue fee.

A fee of $264.00 is incurred upon filing this Amendment by the addition of one (1) independent claim in excess of four (4) and by the addition of ten (10) claims in excess of twenty (20). Applicant's check drawn to the order of Commissioner accompanies this Response. Should the check become lost, be deficient in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

In view of the above, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. Reconsideration of the rejections and objections is requested. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE TITLE

In accordance with the Examiner's suggestion in paragraph 3 on page 2 of the Office action (Paper No. 7) dated 2 October 2001, Applicant submits herewith a new title in replacement of the original title. Accordingly, please change the title, as follows:

-- [COMPUTER SYSTEM HAVING CONFLICT FIXING FUNCTION AND CONFLICT FIXING METHOD] <u>APPARATUS AND METHOD FOR SELF DIAGNOSIS, REPAIR, REMOVAL BY REVERSION OF COMPUTER PROBLEMS FROM DESKTOP AND RECOVERY FROM BOOTING OR LOADING OF OPERATING SYSTEM ERRORS BY REMOVABLE MEDIA</u> --.

IN THE SPECIFICATION

Please enter the following amendments:

1.   Please amend the last paragraph on page 6 (page 6, lines 17-21), as follows:

Referring to FIG. 5, a computer system having a conflict repair function according to the present invention includes a conflict repair control unit 500, a main memory 510, an input output unit 520, an auxiliary memory unit 530, and a conflict [repair] CD-ROM 540. The conflict [repair] control unit 500 is comprised of a state information recording portion 502, a conflict sensing portion

504, a state diagnosing portion 506, and an existing state reverting portion 508.

2.   Please amend the first complete paragraph on page 8 (page 8, lines 3-15), as follows:

The diagnosed contents of the computer system processed the state diagnosing portion 506 will now be described in detail. As for the device, the type of a processor is checked, the capacity of the main memory 510 is found out by checking the state of the main memory 510, the type, resolution, and color of a video card are checked, a check of whether an [MPEC] MPEG card will be recognized is made by executing an [MPEC] MPEG file, an execution state of a modem command is tested, the operations of each of a floppy disk device, a CD-ROM device, and a digital video disk (DVD) device are tested, and serial/parallel ports are checked. As for the operating system, a check of whether system files in a system directory are damaged is made, and a configuration file and registration information are also checked on whether they are damaged. The state diagnosing portion 506 repairs an abnormality by estimating the cause of generation of the abnormality on the basis of the above diagnosed contents. Also, when a conflict incapable of being repaired by current diagnosis contents occurs, the state diagnosing portion 506 produces a message for reporting the fact to the user.

3.   Please amend the first complete paragraph on page 9 (page 9, lines 4-13), as follows:

Referring to FIG. 6, [the conflict repair CD-ROM] the recording medium for conflict repair may be a CD-ROM that records a boot image 600 for booting the computer system form a CD-ROM driver, a program image 610 of an operating system and application programs to be installed, and a CD-ROM repair control program 620. The boot image 600 is an image of system files included in an operating system for managing the operation of a computer system by being loaded in the main memory 510 of the computer system when the computer system sets a CD-ROM driver as a master device to be booted. The program image 610 is a back-up image of an operating system and application systems which are basically installed in the auxiliary memory unit 530 in the computer system. The program image 610 is compressed and backed up. The program image 610 includes a list of the title, size, directory, and attribute of each file to allow the user to select files to be installed in the auxiliary memory unit 530.

4. Please amend the first paragraph on page 10 (page 10, lines 1-12), as follows:

The operation of the present invention will now be described in detail. Referring to FIG. 7, a process for reverting a computer system to its initial software installation state is as follows. First, when the computer system is normally booted, conflict repair control is executed in a background operation to periodically inspect the computer system, in steps 700 and 705. When the conflict repair control unit senses a GPF, a system registry error, or a system hardware information abnormality from the computer system, the computer itself may initiate a self-diagnosis program in

step 705 or the user can push button 525 of input/output unit 520 in step 708 to initiate self-diagnosis, it generates a top most window and receives instructions from the user, in steps 710 and 735. When the user presses down on a state diagnostic button to check his or her computer system, the state of the computer system is diagnosed, and when a conflict is sensed, the conflict is immediately fixed using diagnosed contents, in steps 715 through 725. However, when the sensed conflict cannot be fixed by the diagnosed contents, the conflict repair control unit generates the top most window and receives an instruction from the user, in steps 730 and 735.

IN THE CLAIMS

Please cancel claims 7-13 without prejudice or disclaimer as to their subject matter and newly add claims 16-37 by this Amendment.